General
Torrance
File

Stormwater Pollution Prevention Plan

Boeing Realty Corporation
19503 South Normandie Avenue
Los Angeles, California

March 1998

MONTGOMERY WATSON

STORMWATER POLLUTION PREVENTION PLAN

19503 S. NORMANDIE AVENUE
LOS ANGELES

March 1998

Prepared For:

BOEING REALTY CORPORATION
4060 Lakewood Boulevard, 6th Floor
Long Beach, California 90808

Prepared By:

MONTGOMERY WATSON
250 North Madison Avenue
Pasadena, California 91101

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CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware of that there are significant penalties for submitting false information, including possibility of fine and imprisonment for knowing violations.

S. Mario Stavale
Project Manager

SECTION 1.0

INTRODUCTION

The purpose of this section is to provide background information on the regulatory development of National Pollutant Discharge Elimination System (NPDES) stormwater permits, discuss the purpose of this Stormwater Pollution Prevention Plan (SWPPP), and discuss state-specific General Stormwater Permit requirements associated with construction activity.

1.1 BACKGROUND

The Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA), was amended in 1972 to prohibit the point source discharge of pollutants to United States waters unless the discharge complies with an NPDES permit. Further amendments to the CWA in 1987 established a framework to regulate municipal and industrial stormwater discharges under the NPDES program. On November 16, 1990, the U.S. Environmental Protection Agency (EPA) published final regulations for stormwater discharge permits. The regulations require that discharge of storm water associated with construction activity from soil disturbances of five (5) acres or more must be regulated as an industrial activity and covered by a NPDES permit. In many cases, states such as California have received NPDES permitting authority from EPA to write individual or general stormwater permits. These NPDES permits generally require dischargers to do the following:

- Eliminate or reduce non-stormwater discharges to stormwater systems and other waters of the nation,
- Develop and implement an SWPPP, and
- Perform inspections of stormwater pollution prevention measures (control practices).

1.2 PURPOSE

This SWPPP was prepared to identify and detail the actions the owner of a construction site must take to prevent the contamination of stormwater runoff. The two major objectives of the SWPPP are to help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges, and to describe and ensure the implementation of practices which will reduce sediment and other pollutants in stormwater discharges.

One of the most important factors in developing an SWPPP include evaluating alternatives available to a construction site to control stormwater contamination. These alternatives might include administrative actions such as training and inspection procedures; stabilization

practices such as seeding; or control practices such as dikes and detention basins. In order to develop the most cost-effective plan, the various alternatives must be considered for each construction site, tailoring the SWPPP to the needs and requirements of the individual site.

1.3 CALIFORNIA GENERAL PERMIT

The State Water Resources Control Board (SWRCB) developed a General Stormwater Permit for construction activity (Permit No. CAS000002) and required dischargers who wished to be covered under the General Permit to submit a permit application to the SWRCB. An application for the Boeing Realty Corporation (BRC, formerly McDonnell Douglas Realty Company) Torrance site was submitted to the SWRCB by December 12, 1997. Notification of issuance and coverage under the General Permit was received by BRC in a notification letter from the SWRCB dated December 18, 1997. A copy of the permit application is included in Appendix A.

The following SWPPP was prepared to meet the objectives and requirements of the General Permit and to ensure that a carefully documented record is kept to minimize the potential for stormwater contamination. This plan details general stormwater pollution prevention procedures as well as site-specific information. The plan includes sections describing site location and construction activities, materials handling procedures, stormwater management and controls, stormwater monitoring issues, and administrative procedures.

SECTION 2.0

CONSTRUCTION SITE DESCRIPTION

The purpose of this section is to identify the construction site location, define its construction activities, and describe the site and stormwater drainage system.

2.1 SITE LOCATION AND CONSTRUCTION ACTIVITIES

The site is located at 19503 South Normandie Avenue in the City of Los Angeles, California. The site was formerly owned by the Douglas Aircraft Company (DAC) and designated as the C6 Facility. The property was transferred to McDonnell Douglas Realty Company (MDRC) in June, 1996. The site is currently owned by MDRC's successor in interest, Boeing Realty Corporation. The location map of the site is shown in Figure 1 on a USGS 7.5 minute series topographic map.

The C6 Facility was used to manufacture components for various aircraft and recently has functioned as a warehouse. The intent of the site construction is to prepare the site for property transfer. The specific construction activities include demolition of existing buildings and structures, and remedial action on impacted areas from previous industrial activities due to spills or leaking underground facilities. The remedial action may include removal of underground facilities, excavation of potential impacted soil, and backfill with suitable material.

2.2 SITE DESCRIPTION

The site is bordered on the north by the 190th Street, on the east by Normandie Avenue, on the south and east by industrial areas. The total area of the facility is approximately 170 acres with much of the site consisting of impervious areas (i.e., pavement and buildings). A site map is shown on Figure 2.

2.3 STORMWATER DRAINAGE SYSTEM

The existing stormwater drainage system at the C6 Facility includes open ditches along the south and west boundaries, catch basins and storm drains within the building areas. The storm drain system connects to a final outfall at the north-east corner of the site. The outfall is connected to the storm channel of the City of Los Angeles. The drainage system will not be altered during the initial construction phase. The drainage area of the discharge point encompasses most of the site with approximately 75% of the area covered by impervious surfaces. Figure 3 shows the point of existing stormwater discharge.

SECTION 3.0

MATERIALS HANDLING PROCEDURES

The purpose of this section is to identify significant materials handling on the construction site, evaluate materials handling and management practices for potential contamination of stormwater, and identify significant spills or leaks of materials reported at the site.

3.1 SIGNIFICANT MATERIALS INVENTORY

Significant materials used at the facility that have the potential to be present in stormwater runoff are listed in Table 1. This table includes information on material type, storage, and location.

3.2 POTENTIAL STORMWATER CONTAMINATION

Materials handling and management practices at the facility were evaluated for potential contamination of stormwater. This potential exists whenever there is a possibility of material exposure outdoors. Contamination potential may be divided into the following categories:

- Materials Transfer Operations
- Materials Storage
- Materials Disposal Operations
- Potential Erosion Areas
- Nonstormwater Discharges

The possibilities for stormwater contamination from these activities or circumstances are described in detail below. General information is provided first in order to develop a comprehensive inventory of circumstances to be evaluated, followed by materials handling and management practices specific to the site.

3.2.1 Materials Transfer Operations

Background. In general, unless liquid or dry materials are transferred carefully, there is a potential for loss or spillage. Materials in bulk are potential sources of small volume spills or dispersion. Over time, these can accumulate and become a source of stormwater contamination. Unless transfer or relocation operations are in completely enclosed areas with proper drainage, there exists a potential for stormwater contamination. When materials are received or transferred in containers, there is also a potential for stormwater contamination. Accidents in transfer operations, equipment movement, improper container closure, and other situations create a potential for spillage and subsequent stormwater contamination. Unless transfer locations are drained separately from the stormwater system, any spills or dispersions in these areas are potential sources of stormwater contamination.

Site-Specific. The construction activities involve transfer of demolition debris, removal of underground facilities, and excavation of soil. The excavated soil will either be transferred to a storage area waiting for backfill or off-site disposal, or to a land treatment unit for processing.

3.2.2 Materials Storage

Background. In general, improper materials storage can be a source of stormwater contamination. Uncovered or inadequately covered materials could get into stormwater and, depending on their composition, be a source of contamination. Similarly, if materials are improperly enclosed, overstocked, improperly stacked, or incorrectly handled they may become sources of stormwater contamination. Bulk materials in storage areas or liquids stored in drums can be susceptible to spills or loss unless they are properly protected. To contain spills or stormwater run-on, certain areas may need to be diked or bermed.

Site-Specific. Materials which are suspected to be impacted by previous industrial activities or new construction material will be stockpiled on site at various locations depending upon construction schedule.

3.2.3 Materials Disposal Operations

Background. Improper materials disposal operations and locations can be a potential source of stormwater contamination. Dumpsters and compactor areas should be kept clean. Storage units should be intact without obvious damage or leakage, and units should be covered. Liquid waste materials should be properly stored and managed, preferably in a diked or bermed area, or under a roof. Wash water from vehicle/equipment washing and decontamination cleaning operations should be disposed of properly and not allowed to run into stormwater conveyances.

Site-Specific. Waste materials generated at the site may be categorized as hazardous waste, non-hazardous soil and debris, and standard refuse/sanitary waste. Hazardous soil, or non-hazardous soil not suitable for backfill, will be disposed off-site at a suitable facility. Standard refuse (e.g., regular garbage) will be loaded into dumpsters on the site for garbage pickup. The available existing facilities or temporary toilet facility will be used for sanitary waste collection.

3.2.4 Potential Erosion Areas

Background. Commonly, if erosion occurs, it damages not only the site, but also may be a source of stormwater contamination. Areas of the site already eroded will continue to erode and provide a source of stormwater contamination until repaired. Drainage swales or other stormwater conveyances may become damaged by erosion. Areas subject to uncontrolled runoff may erode if proper controls are not implemented. An inventory of all sites of existing erosion, damaged conveyances, and uncontrolled runoff should be performed at the site and a determination made of the appropriate countermeasures.

Site-Specific. The site is relatively flat and there are no erosion problems or potential erosion problems, except the disturbed area for excavation or stockpile. The general drainage pattern and grade will not be altered during this construction.

3.2.5 Nonstormwater Discharges

Background. In general, discharges of nonstormwater into storm drainage systems can become a source of stormwater contamination. Decontamination water, vehicle wash water, dumping, spills, leakage from storage/transfer areas, and sanitary wastes typically enter the stormwater drainage system through improper management at the construction site. Certain nonstormwater discharges, such as landscape irrigation of erosion control measures, pipe flushing and testing, street washing, and dewatering, may be necessary.

Site-Specific. Decontamination water and construction vehicle wash water, if any, will be properly contained away from the storm drain system.

3.3 HISTORIC SPILL AND LEAK RECORD

Leaking underground storage tanks and piping containing petroleum hydrocarbons and solvents from the previous industrial activities have been identified in the remedial investigation. Potential impacts on the industrial processing area has also been identified from the site investigation.

SECTION 4.0

STORMWATER MANAGEMENT AND CONTROLS

After reviewing the potential pollutants at this site, a list of BMPs was generated to reduce the risk of contaminants entering stormwater runoff.

4.1 BEST MANAGEMENT PRACTICES (BMPs) IMPLEMENTATION PROGRAM

The BMPs suitable for this facility are categorized as administrative procedures, nonstructural controls, and structural controls. The administrative procedures and nonstructural controls are often related to contractor's activities. The structure controls are often related to erosion/sediment control and post-construction/treatment control of stormwater discharge. These are discussed below.

4.1.1 Administrative Procedures

Materials Inventory. An active inventory of construction materials used and stored at the facility is maintained by the contractor.

Reporting. The owner and contractor are to ensure that the construction site complies with environmental permit requirements and that site BMPs are practiced or implemented.

Record Keeping. All records of environmental permits, hazardous waste manifests, material safety data sheets, etc., are kept at appropriate locations at the site.

Employee Training. Periodic training sessions for construction crew to ensure adequate understanding of materials handling, equipment operation, spill prevention and response, good housekeeping techniques, and health and safety hazards are conducted.

4.1.2 Nonstructural Controls

Visual Inspections. Contractor will perform visual inspections of the site during construction period. These inspections will verify maintenance and implementation of structural and nonstructural BMPs, and include materials storage areas, trash dumpsters, stormwater facilities, and construction staging areas. If an inspection finds that remedial or preventive action is warranted, the contractor will identify mitigative efforts.

Preventive Maintenance. A preventive maintenance program identifies equipment and systems, that upon failure, could cause exposure of significant materials to stormwater. This includes equipment and systems which are essential elements of stormwater conveyance.

Periodic inspections and testing of such equipment and systems are made with appropriate adjustment, repair, or replacement of parts.

Good Housekeeping. Trash and wind-blown debris is collected and removed from the premises as needed. Any spills or material leaks are promptly and completely cleaned and/or repaired. The public road will be inspected and cleaned as necessary.

Labeling. All chemical and/or hazardous waste containers are labeled with warning labels that indicate the contents of the container and appropriate personnel to contact in the event of a problem or emergency.

Materials Handling. Material spills are minimized by implementing an employee training program to ensure careful handling procedures.

Mitigation Cleanup. Containment and cleanup equipment, including sorbent booms, sorbent pads, and protective clothing are available for quick and easy access.

Litter Control. Facility personnel remove litter and wind-blown debris from the property as needed.

4.1.3 Structural Controls

Erosion Control. The exposed soil surface along the open ditch or stockpile will be covered with tarp to prevent rain-on and wind erosion as necessary. Additional sandbags or straw bales may be needed around the stockpile to prevent run-on. Temporary drainage swales may be constructed or re-grading in area where temporary change of grade occurs during construction. Additional sandbags or straw bales may be placed to divert the flow around the construction area or to reduce the velocity as required.

Sediment Control. The existing catch basin will be diked with sandbags or straw bales to prevent sediment entering the storm drain system. Additional sediment basin may be constructed prior to the existing storm drain discharge point.

Soil Stabilization. The exposed soil surface may be covered with tarp and sandbags to prevent rain-on and wind erosion as necessary.

Decontamination Area. A designated decontamination area with liner and berm will be assigned during construction. The decontamination water will be contained for proper disposal.

Table 2 summarizes BMPs incorporated into the Stormwater Management Program. In addition to the BMPs listed above, the structural control measures shall include other elements in erosion/sediment control plan required by the local agency. The erosion control plan is shown in Appendix B.

4.2 MANAGEMENT OF POTENTIAL CONTAMINATION SOURCES

Potential sources of stormwater contamination at the site have been presented in Section 3. To specifically address these sources, primary BMPs have been identified and are listed in Table 3.

SECTION 5.0

INSPECTION

5.1 DESCRIPTION

The Stormwater General Permit for construction activity requires inspection of the construction site prior to anticipated storm events and after actual storm events to identify areas contributing to a discharge of stormwater associated with construction activity and to evaluate whether control practices to reduce pollutant loading identified in the SWPPP are adequate and properly implemented. The inspection will be recorded on an inspection checklist which will include the date of inspection, the individual who performed the inspection, and the observations. A sample inspection checklist form is presented in Appendix C.

SECTION 6.0

ADMINISTRATIVE PROCEDURES

In order to keep track of construction activities, BMPs, record keeping, and reporting requirements, an administrative system will be developed and implemented. Administrative procedures will address the topics of responsible parties, plan review, plan revision, reporting, and record keeping. Records will be kept of relevant and required information including personnel training, inspections, significant spills, and follow-up responses.

6.1 STORMWATER POLLUTION PREVENTION PLAN COMMITTEE

The SWPPP Committee is responsible for overseeing the development, administration, and implementation of this plan for the site and will consist of the following individuals:

- S. Mario Stavale, BRC Project Manager
- Marty Grinley, General Contractor

In addition, the Committee will be responsible for assigning trained inspectors to periodically inspect the site to ensure implementation of the SWPPP as detailed below.

6.2 PLAN REVIEW

The SWPPP shall be reviewed and revised whenever there is a change in construction activity which may discharge pollutants in stormwater. When information critical to the purpose of the document changes, revisions will be made in accordance with procedures listed below in the Plan Revision section.

6.3 PLAN REVISION

The SWPPP must be amended whenever there is a change in construction activity which may affect the discharge of significant quantities of pollutants to surface water, or if it has not achieved the general objectives of controlling pollutants in stormwater discharges as identified during inspection. If the SWPPP must be revised, the procedures listed below represent a minimum level of effort based on changes in activity.

- Update the materials inventory for all affected operations
- Update Table 1, Potential Sources of Stormwater Contamination, as necessary
- Change materials handling procedures, as necessary
- Update BMPs, as necessary
- Update and/or revise the SWPPP

6.4 REPORTING

Reporting requirements described in the General Permit are summarized below.

6.4.1 Annual Compliance Certification

Based on the inspection results, an annual compliance certification will be prepared to certify that the construction activity is in compliance with the requirements of the General Permit and the SWPPP implementation. The annual compliance certification will be kept in a file. A sample certificate of compliance form is presented in Appendix C.

6.4.2 Non-Compliance Reporting

In the event of non-compliance, a non-compliance notification will be filed with the Regional Water Quality Control Board of Los Angeles Region within 30 days of identification of non-compliance. The notifications will identify the type of non-compliance, describe the actions necessary to achieve compliance, and a time schedule to implement. A sample notification of non-compliance form is presented in Appendix C

6.5 RECORD KEEPING

All records of inspections, compliance certifications, and non-compliance reporting will be kept at the construction site and BRC office. The records will be retained for a period of three years beyond the construction period.

A copy of the SWPPP will be maintained at the site at all times and made available upon request. The SWPPP Committee will be responsible for implementing and maintaining the record keeping process.

Tables

MONTGOMERY WATSON

TABLE 1

SIGNIFICANT MATERIALS INVENTORY

Material Name	Physical State	Storage Types	Location
Demolition Debris (concrete, asphalt, steel, building materials)	Solid	Stockpile	various
Excavated Soil (TPH and BTEX impacted)	Solid	Stockpile	various
Excavated Soil (Solvents, e.g. TCE, PCE, MEK, 1,1,1-TCA, etc., impacted)	Solid	Stockpile/Land Treatment Unit	various
Excavated Soil (Other, e.g. Cr, As, Pb, Cd, PAH, PCBs, etc., impacted)	Solid	Stockpile	various
Imported Fill	Solid	Stockpile	various
Decontamination	Liquid	Drums	various
Construction Equipment (e.g. LOF)	Solid/Liquid	Bags/Drums	various

TABLE 2

SUMMARY OF STORMWATER MANAGEMENT PROGRAM

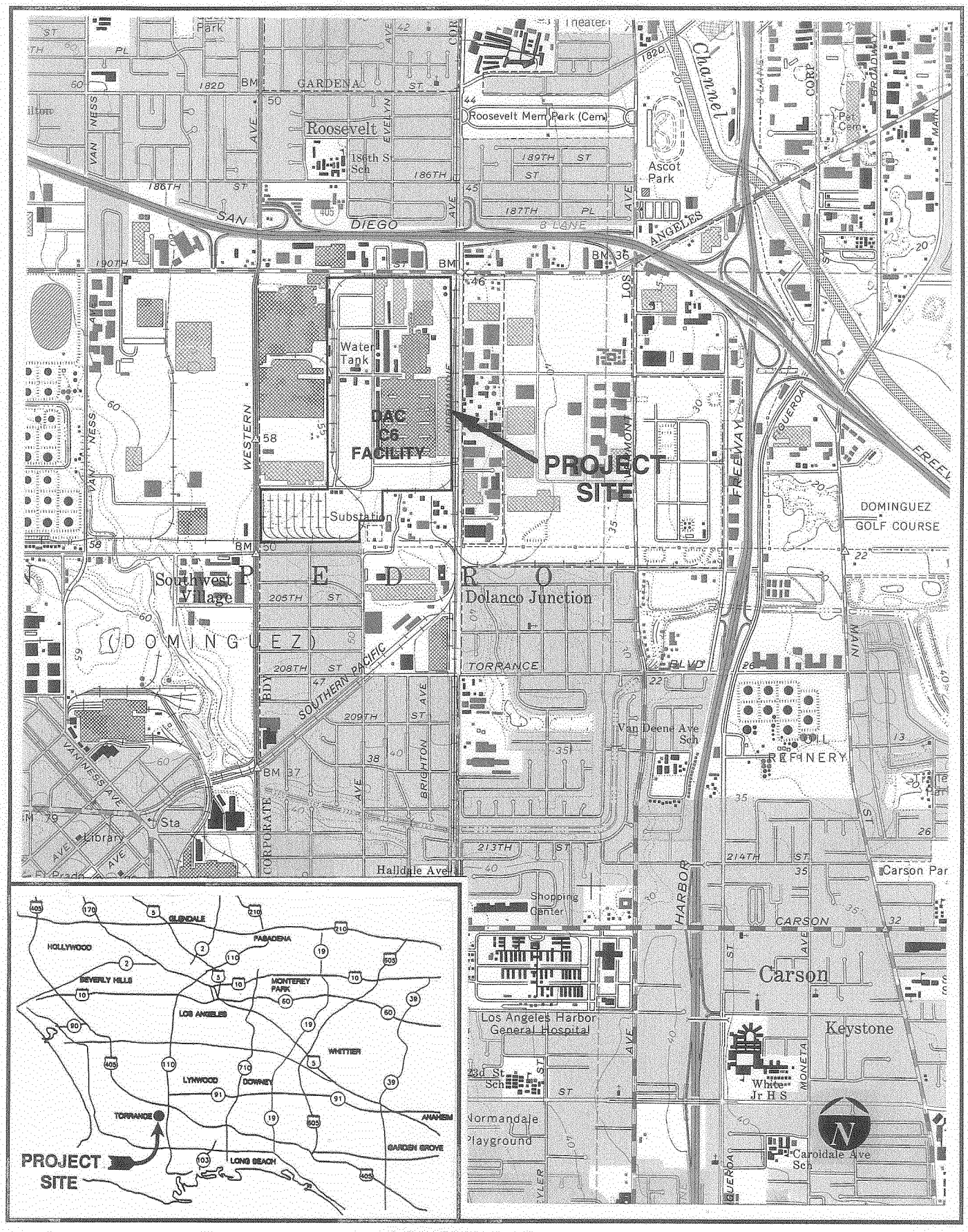
Administrative BMPs	Nonstructural BMPs	Structural BMPs
Materials Inventory	Visual Inspections	Erosion Control
Reporting	Preventive Maintenance	Sediment Control
Record Keeping	Good Housekeeping	Soil Stabilization
Employee Training	Labeling	Decontamination Area
	Materials Handling	
	Mitigation Cleanup	
	Litter Control	

TABLE 3

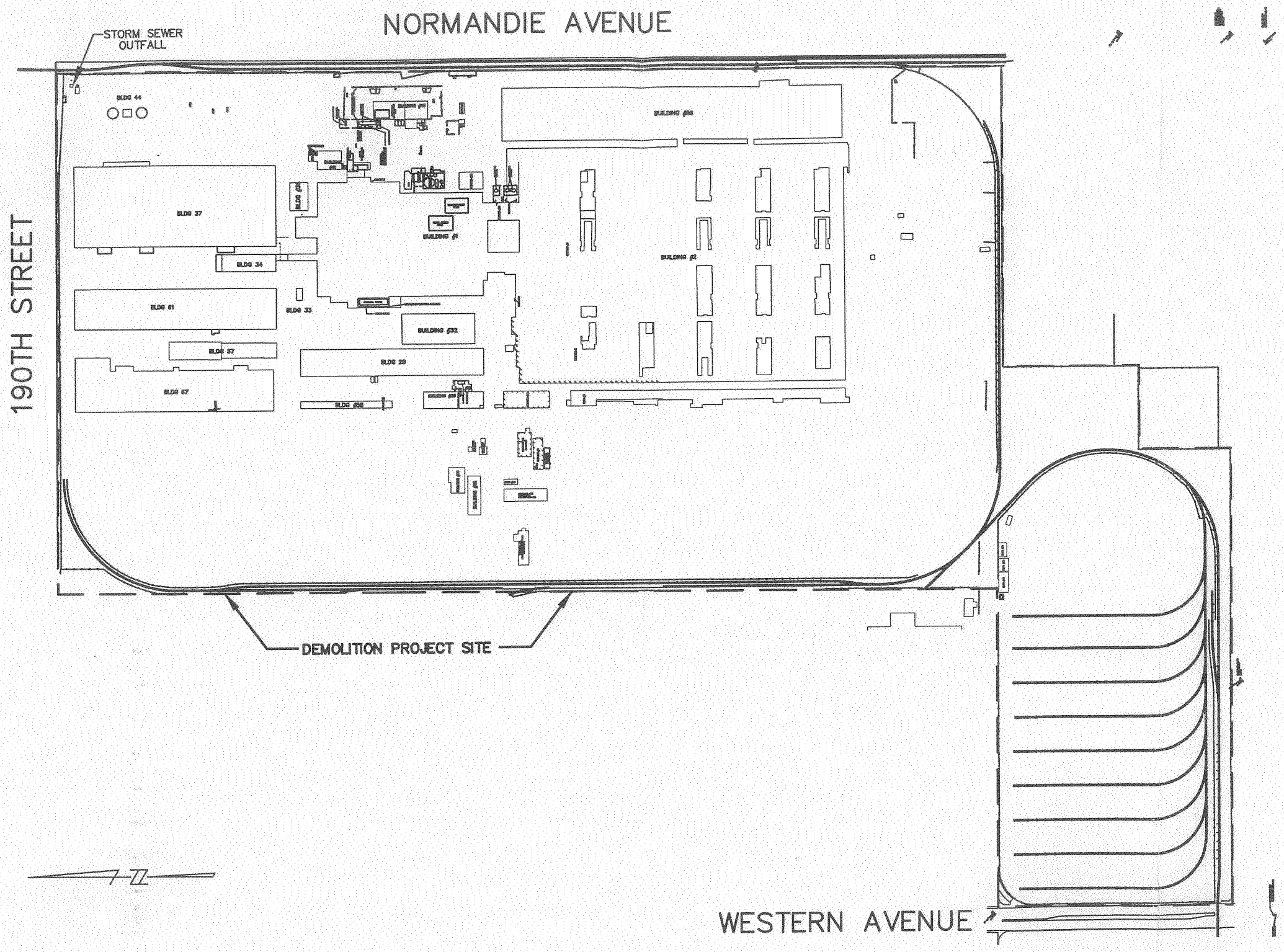
DESCRIPTION OF PRIMARY BMPs FOR POTENTIAL POLLUTANT AREAS

Area of Concern	Potential Contamination	Primary BMPs to be Implemented
Demolition Debris (concrete, asphalt, steel, building materials)	Sediments	Good house keeping, visual inspection, and erosion control.
Excavated Soil (TPH and BTEX impacted)	Sediments, TPH, and BTEX	Good house keeping, visual inspection, mitigation cleanup, and erosion control.
Excavated Soil (Solvents, e.g. TCE, PCE, MEK, 1,1,1-TCA, etc., impacted)	Sediments, VOCs	Good house keeping, visual inspection, mitigation cleanup, and erosion control.
Excavated Soil (Other, e.g. Cr, As, Pb, Cd, PAH, PCBs, etc., impacted)	Sediments, Metals/PAH/PCB	Good house keeping, visual inspection, mitigation cleanup, and erosion control.
Imported Fill	Sediments	Good house keeping, visual inspection, and erosion control.
Decontamination	Sediments, TPH, VOCs, Metals, PAH, PCB	Labeling, materials handling, mitigation cleanup, and decontamination area.
Construction Equipment (e.g. LOF)	Fuel, oil, and maintenance materials	Labeling, good housekeeping, material handling, and mitigation cleanup.
General Area	Sediments, construction debris	Preventive maintenance, good housekeeping, litter control, erosion control, sediment control, and soil stabilization.

Figures



LOCATION MAP
FIGURE 1



JOB No. 1206035.01090010 FILE No. C:\MWDWGS\1206035\01090010\X-BORING.DWG PLOT DATE: 12/04/97

REV	DATE	BY	DESCRIPTION

SCALE: 1"=200'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED
DRAWN BC
CHECKED

SUBMITTED
PROJECT ENGINEER R. C. E. NO. DATE
RECOMMENDED
MONTGOMERY WATSON R. C. E. NO. DATE

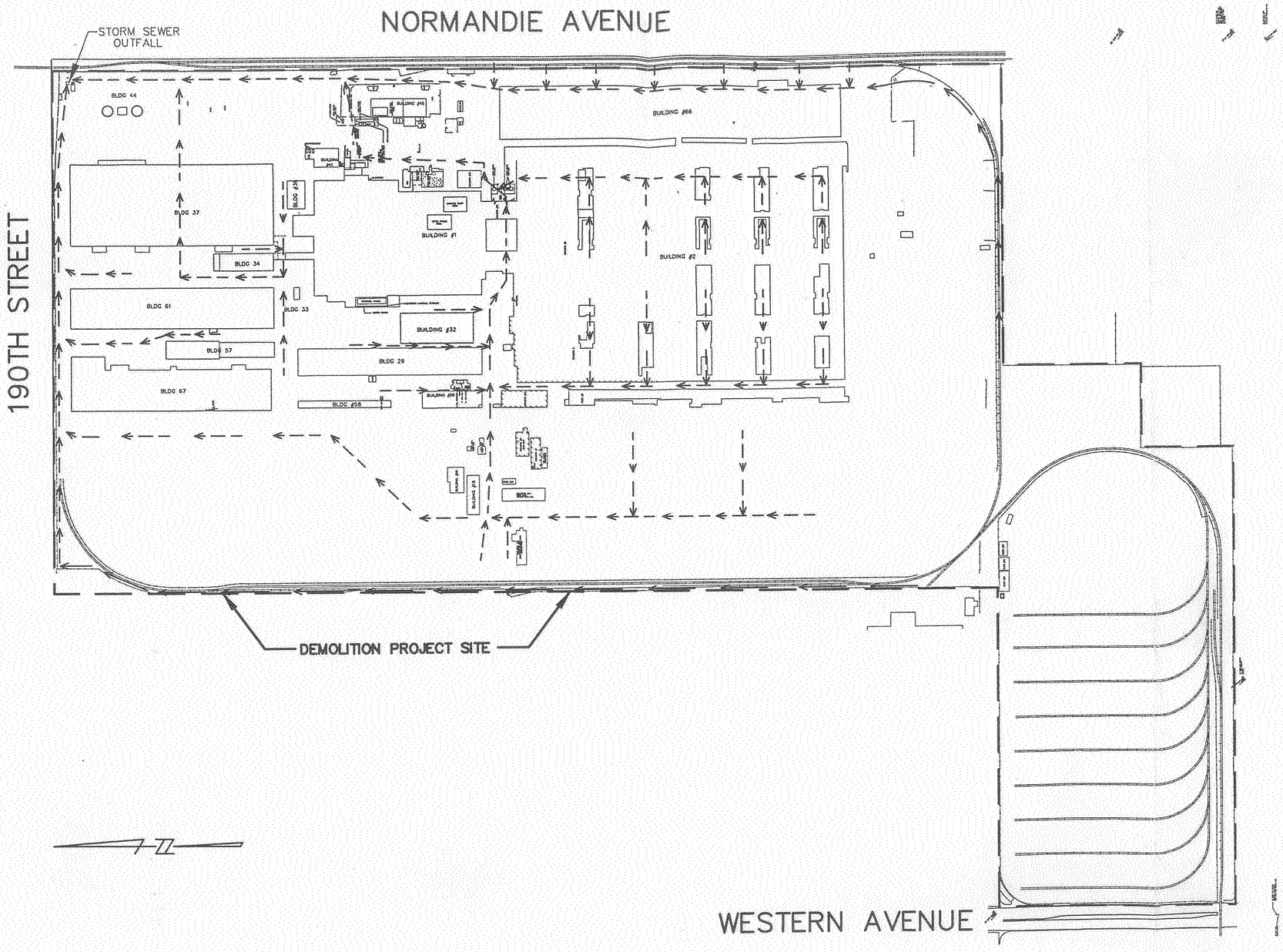
MONTGOMERY WATSON
Pasadena, California

APPROVED 3/25/96 DATE
APPROVED 3/25/96 DATE

BOEING REALTY CORPORATION
BOEING TORRANCE FACILITY

SITE MAP

SHEET FIG. 2 OF SHEETS



LEGEND

——→ CATCH BASIN AND STORM DRAIN

——→ OPEN DITCH

REV	DATE	BY	DESCRIPTION

SCALE: 1"=200'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED

DRAWN BC

CHECKED

SUBMITTED

PROJECT ENGINEER R. C. E. NO. DATE

RECOMMENDED

MONTGOMERY WATSON R. C. E. NO. DATE

MONTGOMERY WATSON
Pasadena, California

APPROVED 3/25/96 DATE

APPROVED 3/25/96 DATE

BOEING REALTY CORPORATION
BOEING TORRANCE FACILITY

DRAINAGE SYSTEM

SHEET FIG. 3 OF SHEETS

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BOE-C6-0063094

Appendix A

MONTGOMERY WATSON

CalEPA
STATE WATER RESOURCES CONTROL BOARD
Mailing Address:
P.O. Box 1977
Sacramento, CA
95812-1977

901 P Street
Sacramento, CA
95814
(916) 657-0757
FAX (916)657-1011

December 18, 1997

PETE WILSON,
Governor

MARIO STAVALE
BOEING REALTY CORPORATION
4060 LAKEWOOD BLVD 6F
LONG BEACH, CA 90808-1700

RECEIPT OF YOUR NOTICE OF INTENT

The State Water Resources Control Board (State Water Board) has received and processed your NOTICE OF INTENT TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY. Accordingly, you are required to comply with the permit requirements.

Your WDID identification number is: 4 19S308332 Please use this number in any future communications regarding this permit.

SITE DESCRIPTION

OWNER:	BOEING REALTY CORPORATION
DEVELOPER:	BOEING REALTY CORPORATION
COUNTY:	LOS ANGELES
SITE ADDRESS:	19503 S NORMANDIE AVE LOS ANGELES, CA 90501
COMMENCEMENT DATE:	10/27/96
EST. COMPLETION DATE:	12/31/00

When construction is complete or ownership has been transferred, dischargers are required to notify the Regional Water Board by submitting a Notice of Termination (NOT). All State and local requirements must be met in accordance with Special Provision No. 7 of the General Permit. I have enclosed a NOT for your future use. If you do not notify the State Water Board that construction activity has been completed you will continue to be invoiced for the annual fee each October.

If you have any questions regarding permit requirements, please contact your Regional Water Board at (213) 266-7592.

Sincerely,

A. Shimizu

Andrey Shimizu
Storm Water Unit
Division of Water Quality

Enclosure

State of California
State Water Resources Control Board

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF THE
GENERAL PERMIT TO DISCHARGE STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER No. 92-08-DWQ)

MARK ONLY ONE ITEM	1. [X] Ongoing Construction	3. [ ] Change of Information
	2. [ ] New Construction	WDID #

I. OWNER

Name	Contact Person
BOEING REALTY CORPORATION	S. MARIO STAVALE
Local Mailing Address	**Title**
4060 LAKEWOOD BLVD. 6F	PROJECT MANAGER

City	State	Zip	Phone
LONG BEACH	CA	90808-1700	562-627-3014

II. CONSTRUCTION SITE INFORMATION

A. Developer	Contact Person
BOEING REALTY CORPORATION	S. MARIO STAVALE
Local Mailing Address	**Title**
4060 LAKEWOOD BLVD. 6F	PROJECT MANAGER

City	State	Zip	Phone
LONG BEACH	CA	90808-1700	562-627-3014

B. Site Address	County
19503 S NORMANDIE AVE.	LOS ANGELES

City	State	Zip	Phone
LOS ANGELES	CA	90501-	

C. Is the construction site part of a larger common plan of development or sale? [ ] Yes [X] No	If yes, name of plan or development

D. Construction commencement date (M M D D Y Y)	E. Projected construction completion date (M M D D Y Y)
10 27 96	12 31 00

III. BILLING ADDRESS

Send to:	Name		
[X] OWNER [ ] DEVELOPER	BOEING REALTY CORPORATION		
	Mailing Address		
	4060 LAKEWOOD BLVD., 6F		
[ ] OTHER (Enter information at right)	City	State	Zip
	LONG BEACH	CA	90808-1700

IV. RECEIVING WATER INFORMATION

A. Does your construction sites's storm water discharge to (Check one):

1. [X] Storm drain system - Enter owners name CITY OF LOS ANGELES
2. [ ] Directly to waters of U.S. (e.g., river, lake, creek, ocean)
3. [ ] Indirectly to waters of U.S.

B. Name of closest receiving water DOMINGUEZ CHANNEL

STATE USE ONLY

WDID:	Regional Board Office	Date Permit Issued:

NPDES Permit Number: CA	Order Number:	Fee Amount Received: $	Date NOI Received:

V. TYPE OF CONSTRUCTION (Check all that apply)

1. [ ] Residential 2. [ ] Commercial 3. [ ] Industrial 4. [ ] Reconstruction 5. [ ] Transportation

6. [ ] Utility 99. [X] Other (Please List)

DEMOLITION/REMEDIATION

VI. MATERIAL HANDLING/MANAGEMENT PRACTICES

A. Types of materials that will be handled and/or stored at the site: (Check all that apply)

1. [ ] Solvents 2. [ ] Metal 3. [ ] Petroleum Products 4. [ ] Plated Products

5. [ ] Asphalt Concrete 6. [ ] Hazardous Substance 7. [ ] Paints 8. [ ] Wood Treated Products

99. [X] Other (Please list)

IMPACTED SOIL

B. Identify proposed management practices to reduce pollutants in storm water discharges: (Check all that apply)

1. [ ] Oil/Water Separator 2. [X] Erosion Controls 3. [ ] Sedimentation Controls 4. [X] Overhaead Coverage

5. [ ] Detention/Desiltation Pond 99. [ ] Other (Please List)

VII. SITE INFORMATION

A. Total size of construction site

170 Acres

B. Percent of site impervious (including rooftops)

Before construction 75 % After construction 75 %

VIII. REGULATORY STATUS

Is the site subject to a locally approved erosion/sediment control plan? [X] Yes [ ] No

If yes, name of local agency

CITY OF LOS ANGELES

IX. CERTIFICATIONS

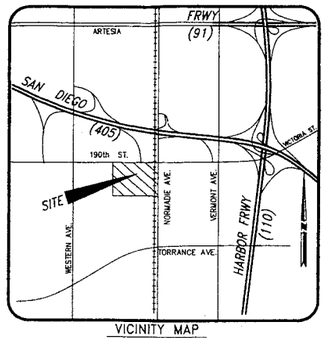
I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment." In addition, I certify that the provisions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan, will be complied with.

Printed Name: S. Mario Stavale

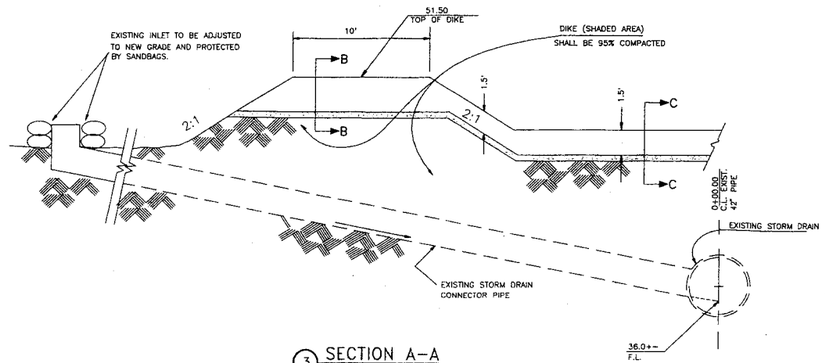
Signature: S. Mario Stavale Date 12/12/93

Title: Project Manager

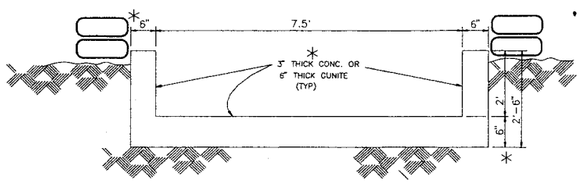
Appendix B



VICINITY MAP
NOT TO SCALE



3 SECTION A-A
NO SCALE



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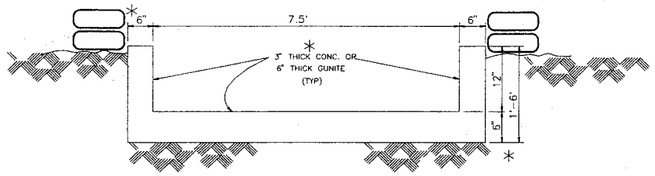
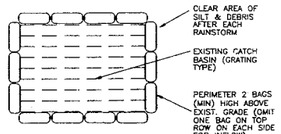
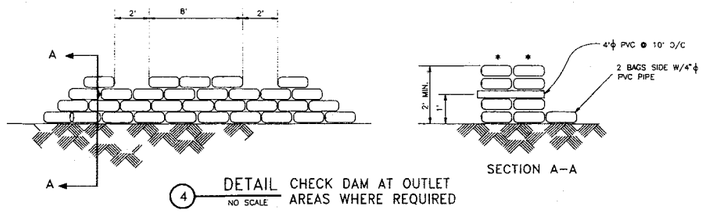
NO SCALE



5 SECTION C-C
NO SCALE



9 SECTION C-C NO SCALE
SANDBAGGING AT EXIST. CATCH BASIN



4 DETAIL CHECK DAM AT OUTLET AREAS WHERE REQUIRED
NO SCALE

* HEIGHT OF CHECK DAM SHOULD NOT EXCEED 3 FEET.
** PROVIDE AN EXTEA ROW OF SANDBAGS FOR EVERY ROW OF SANDBAGS 3 SANDBAGS HIGH.

DEPARTMENT OF PUBLIC WORKS
STORMWATER POLLUTION / EROSION CONTROL NOTES

TEMPORARY EROSION CONTROL MEASURES EFFECTIVE DURING RAINY SEASON NOVEMBER 1 TO APRIL 15.

1. TEMPORARY EROSION CONTROL DEVICES SHOWN ON THE EROSION CONTROL PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED AS AND WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES TO MEET "AS GRADED" CONDITIONS.

2. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR.

3. PROVIDE VELOCITY CHECK DAMS ACROSS THE OUTLETS OF ALL LOTS DRAINING INTO THE STREET.

   B) ALL FILLS SHALL BE GRADED TO PROMOTE DRAINAGE AWAY FROM THE EDGE OF THE FILL.

4. STAND-BY CREWS SHALL BE ALERTED BY THE PERMITTEE OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS. (MARTY GRINLEY, 310-328-5238)

5. ALL UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS FROM THE BOTTOM TO TOP WITH A DOUBLE ROW OF SANDBAGS PRIOR TO BACKFILL. SEWER AND STORM DRAIN TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS WITH A DOUBLE ROW OF SANDBAGS EXTENDING DOWNWARD, TWO SANDBAGS FROM THE GRADED SURFACE OF THE STREET. SANDBAGS ARE TO BE PLACED WITH ALTERNATE HEADER AND STRETCHER COURSES. THE INTERVALS PRESCRIBED BETWEEN SANDBAG BLOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE, BUT NOT EXCEED THE FOLLOWING:

GRADE OF THE STREET	INTERVAL
LESS THAN 2%	AS REQUIRED
2% TO 4%	100 FEET
4% TO 10%	50 FEET
OVER 10%	25 FEET

6. A) PROVIDE STANDARD VELOCITY CHECK DAMS IN ALL UNPAVED GRADED AREAS AT THE INTERVALS INDICATED ABOVE AND AS SHOWN ON THE PLANS. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF SANDBAGS, APPROVED BY THE INSPECTOR, AND SHALL EXTEND COMPLETELY ACROSS THE GRADED AREA OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. EARTH DIKES MAY NOT BE USED AS VELOCITY CHECK DAMS.

   B) PROVIDE STANDARD VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:

GRADE OF THE STREET	INTERVAL
LESS THAN 3%	100 FEET
3% TO 6%	50 FEET
OVER 6%	25 FEET

7. THE STANDARD VELOCITY CHECK DAM SHALL HAVE A MINIMUM HEIGHT OF 12 INCHES. THE VELOCITY CHECK DAM ACROSS OUTLETS OF ALL LOTS SHALL HAVE A MINIMUM HEIGHT OF 18 INCHES. IF SANDBAGS ARE USED, A DOUBLE ROW SHALL BE REQUIRED FOR THE 18 INCH CHECK DAM.

8. AFTER SEWER AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA.

9. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS FORECAST AND SHALL BE MAINTAINED DURING THE RAINY SEASON (NOVEMBER 1 TO APRIL 15).

10. ALL BASINS AND CHECK DAMS SHALL HAVE BEEN PUMPED DRY, AND ALL DEBRIS AND SILT REMOVED WITHIN 24 HOURS AFTER EACH STORM TO RESTORE THEIR CAPACITY.

11. SIZES OF BASINS AND WEIRS ARE TO BE SHOWN ON PLANS, AND OF A CAPACITY TO SERVICE THE WATERSHED AFFECTED.

12. ALL SPILLWAYS FROM BASINS SHALL BE PAVED TO EXISTING PAVED STREET, EXISTING STORM DRAIN CATCH BASIN, OR OTHER APPROVED WATERCOURSE.

13. EROSION CONTROL DEVICES - NECESSARY MATERIALS SHALL BE AVAILABLE ONSITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.

14. RETENTION OR DESILTING BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE, WITHOUT PRIOR APPROVAL OF THE ENGINEER, UNTIL ALL SURFACE IMPROVEMENTS HAVE BEEN COMPLETED.

15. DESILTING BASINS:

   A) OUTLET AND APRON - SEE DETAILS HEREON.
   B) DIKES
      1) MUST BE COMPACTED TO 95% COMPACTION AND SHALL BE CONSTRUCTED UNDER THE DIRECT SUPERVISION OF THE PUBLIC WORKS EROSION CONTROL INSPECTOR.
      2) PLACEMENT OF SPILLWAY AND OUTLET PIPE SHALL BE AS FAR AS PRACTICABLE FROM INLET.
      3) WALLS SHALL NOT EXCEED 2:1 SLOPE.
   C) INLET TO BASIN
      1) WINGWALLS SHALL BE PAVED (AC-3) OR SANDBAG BERMS WHERE APPROVED BY PUBLIC WORKS EROSION CONTROL INSPECTOR.
      2) SLOPE OF INLET SHALL BE EQUAL TO OR MORE THAN THE SLOPE OF THE CARRYING SURFACE IMMEDIATELY ABOVE THE INLET TO AVOID SILTING UP OF INLET.
   D) IF GRAVITY PIPE DRAIN IN IMPRACTICABLE, A STAND-BY PUMP SHALL BE PROVIDED FOR EACH DESILTING BASIN. A GUARD IS TO BE ON CONTINUOUS DUTY WHILE BASIN CONTAINS WATER.
   E) DESILTING BASIN REQUIRED FOR TEMPORARY EROSION CONTROL WILL NOT BE PERMITTED IN THE STREET AREAS UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER.

STORMWATER POLLUTION CONTROL REQUIREMENTS FOR GRADING CONSTRUCTION

A. THE FOLLOWING NOTES AND BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE BEST MANAGEMENT PRACTICE HANDBOOK, CALIFORNIA STORMWATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA 1993, OR THE LATEST REVISED EDITION, MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT (ADDITIONAL MEASURES MAY BE REQUIRED, IF DEEMED APPROPRIATE BY CITY INSPECTORS):

   1. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ONSITE AND MAY NOT BE TRANSPORTED FROM THE SITE SHEETFLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
   2. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
   3. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
   4. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ONSITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
   5. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
   6. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
   7. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.

B. THE FOLLOWING BMP'S AS OUTLINED, BUT NOT LIMITED TO, THE BEST MANAGEMENT PRACTICE HANDBOOK, CALIFORNIA STORMWATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA 1993, OR THE LATEST REVISED EDITION, MAY APPLY DURING CONSTRUCTION (ADDITIONAL MEASURES MAY BE REQUIRED, IF DEEMED APPROPRIATE BY COUNTY):

CA001	- DEWATERING OPERATIONS
CA010	- MATERIAL DELIVERY AND STORAGE
CA011	- MATERIAL USE
CA012	- SPILL PREVENTION AND CONTROL
CA020	- SOLID WASTE MANAGEMENT
CA021	- HAZARDOUS WASTE MANAGEMENT
CA022	- CONTAMINATED SOIL MANAGEMENT
CA030	- VEHICLE AND EQUIPMENT CLEANING
CA031	- VEHICLE AND EQUIPMENT FUELING
CA032	- VEHICLE AND EQUIPMENT MAINTENANCE
CA040	- EMPLOYEE/SUBCONTRACTOR TRAINING
ESC01	- SCHEDULING
ESC02	- PRESERVATION OF EXISTING VEGETATION
ESC10	- SEEDING AND PLANTING
ESC11	- MULCHING
ESC21	- DUST CONTROLS
ESC24	- STABLIZED CONSTRUCTION ENTRANCE

CONSTRUCTION NOTES:

1. EXISTING PROPERTY LINE RETAINING WALL WITH CURB AND GUTTER TO REMAIN IN SERVICE.
2. CONSTRUCT SANDBAG CHECK DAM - 2 ROWS IN WIDTH AND 2 BAGS HIGH.
3. DISCHARGE CONCRETE/GUNITE SPILLWAY AT EXISTING GRATING CATCH BASIN.
4. CONSTRUCT SANDBAG CHECK DAM PER DETAIL 4 ON SHEET 1.
5. CONSTRUCT CONCRETE OR GUNITE SWALE PER SECTION C-C ON SHEET 1.
6. EXIST. CONNECTOR PIPE TO REMAIN IN PLACE. (APPROX. LOCATION)
7. CONSTRUCT DESILTING BASIN COMPACTED DIKE WITH CMP OUTLET PER SECTION A-A ON SHEET 1.
8. CONSTRUCT SANDBAG CHECK DAM - SINGLE ROW AND 2 BAGS HIGH.
9. MODIFY CATCH BASIN OPENING SANDBAG PROTECTION PER DETAIL 2 ON SHEET 1.
10. PROTECT SEWER MONITORING STATION WITH SINGLE ROW OF SANDBAGS, 3 BAGS HIGH.
11. 2' WIDE X 1' HIGH GRAVEL BERM.
12. ONE ROW SANDBAG.

HARBOR GATEWAY

SWPPP/EROSION CONTROL PLAN

DATE 01/20/98 SCALE 1" = 30'
DESIGNED ZP DRAWN NB
SHEET NUMBER E1
REV 1.30.98
DRAWING FILE DESER.DWG
PROJECT NUMBER 963

Dalcin Cummins Associates
PROFESSIONAL ENGINEERS · LAND DEVELOPMENT CONSULTANTS
17625 Crenshaw Blvd., Ste. 300
Torrance, California 90504
(213)321-0330 · (310)327-0018

BOE-C6-0063100

W. 190TH STREET

HARBOR GATE WAY

NORMANDIE AVE

KNOX ST.

LIMITS OF PROJECT
33.04 ACRES

PPROPOSED DESILTING BASIN

DETAIL HEREON

GRADE TO DRAIN TO BASIN

GRADE FLOWLINE 0.5%

GRADE TO DRAIN TO BASIN

LIMIT OF GRADING

FUTURE SUBDIVISION BY OTHERS
NOT A PART

BUILDING #1

EXISTING STRUCTURE TO REMAIN (TYP.)

EXIST. BLDG.

EXISTING PAD

FLOW

FENCE ON P.L.

NEW 3" GAS LINE

EXIST. BLDG.

BUILDING #18
2 STORY WOOD FRAME BLDG.

BUILDING #19
3 STORY WOOD FRAME BLDG.

BUILDING #20
7 FUEL DISPENSERS
6300 GAL.
2 3000 GAL.

BUILDING #22

BUILDING #12

STORAGE AREA AND ACCESS

CONSTRUCTION GATE

TOP OF DIKE ELEV.

SCALE 1"=60'

EXIST. DRAIN INLET

DETAIL
N.T.S.

CONSTRUCTION NOTES:

1. EXISTING PROPERTY LINE RETAINING WALL WITH CURB AND GUTTER TO REMAIN IN SERVICE.
2. CONSTRUCT SANDBAG CHECK DAM - 2 ROWS IN WIDTH AND 2 BAGS HIGH.
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12. ONE ROW SANDBAG.

HARBOR GATEWAY

EROSION CONTROL PLAN

Dalcin Cummins Associates
PROFESSIONAL ENGINEERS • LAND DEVELOPMENT CONSULTANTS
17625 Crenshaw Blvd., Ste. 300
Torrance California 90504

DATE 01/15/98 | SCALE 1"= 60'
DESIGNED ZP | DRAWN MB
SHEET NUMBER E2
REV 1/30/98
DRAWING FILE | REVISED

BOE-C6-0063101

Appendix C

MONTGOMERY WATSON

GENERAL PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY

INSPECTION CHECKLIST

19503 South Normandie Avenue, Los Angeles

[ ] Regular Inspection
[ ] Pre-Storm Event Inspection
[ ] Post-Storm Event Inspection
Storm: Heavy Medium Light
Rainfall: _____ Inches

Date:_____(M T W Th F Sa S) Inspected By:_____
(mm/dd/yy)

Item	Yes	No	Does Not Apply	Corrective Action
Implementation of Non-Structural BMPs				
Administrative Procedures:				
Material Inventory				
Reporting				
Record Keeping				
Employee Training				
Preventive Maintenance				
Good Housekeeping				
Labeling				
Material Handling				
Mitigation Cleanup				
Litter Control				
Implementation of Structural BMPs				
Erosion Control Plan				
Sediment Control Plan				
Soil Stabilization				
Decontamination Area				
Storm Drain Outfall:				
• Evidence of sediment, cloudiness, discolorations				
• Evidence of floating material, oil/grease sheen, odors				
General Area:				
• Evidence of erosion on cut or fill slopes				
• Evidence of sediment, debris, or mud on public roads at access area				
Others: (List additional items inspected)				
•				
•				
•				
•				

GENERAL PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY

CERTIFICATION OF COMPLIANCE

Site Location: 19503 South Normandie Avenue
Los Angeles, CA 90501

WDID: 4 19S308332

Certification Period: _____ through _____
(mm/yy) (mm/yy)

I Certify under penalty of law that the construction activities at the site referenced above are in compliance with the requirements of the General Permit for Stormwater Discharge Associated with Construction Activity for the period indicated above.

Name: _____ Title: _____

Signature:_____ Date: _____

GENERAL PERMIT FOR
STORMWATER DISCHARGE ASSOCIATED WITH
CONSTRUCTION ACTIVITY

NOTIFICATION OF NON-COMPLIANCE

To: Los Angeles Regional Water Quality Control Board
101 Centre Plaza Drive
Monterey Park, CA 91754-2156

Site Location: 19503 South Normandie Avenue
Los Angeles, CA 90501

WDID: 4 19S308332

Notification Date: _____

Description of Type(s) of Non-Compliance:

Corrective Measures:

Schedule to Complete the Corrective Measures:

Submitted by: _____